

MULTIMEDIA



UNIVERSITY

STUDENT ID NO

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MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 1, 2016/2017

TPM7011 – SOFTWARE PROJECT MANAGEMENT
(All sections / Groups)

12 October, 2016
8.00 pm – 10.00 pm
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 5 pages with 4 Questions only.
2. Attempt **ALL FOUR** questions. All questions carry equal marks and the distribution of the marks for each question is given.
3. Please print all your answers in the Answer Booklet provided.

Question 1**Case study: Good Practices for Software Project Management**

(Source: *Information Technology Project Management, 7th Edition* © 2014 Course Technology, Cengage Learning)

Study the case below and answer subsequent questions in relation to the case.

Having specific deliverables and phase exit points at the end of project or product development phases helps managers make better decisions about whether to proceed, redefine, or kill a project. Improvement in IT project success rates reported by the Standish Group has been due in part to an increase ability to know when to cancel failing projects.

Another example of the power of management oversight comes from Huntington Bancshares, Inc. This company has an executive steering committee, a group of senior executives from various parts of the organization who regularly review important corporate projects and issues. The committee met weekly to review project's progress and discussed work planned for the following week to ensure the project team was not missing a beat on the project.

Managers in the motorcycle industry also understand the importance of overseeing their IT projects. For example, Harley-Davidson Motor Company used to focus only on producing and selling high-quality motorcycles. In 2003, however, management realized that it had to improve on its IT operations and control in order to stay in business. They adopted COBIT (Control Objectives for Information and related Technology) and quick enough to realize the importance of control and performing control activities.

AgenciaClick developed a custom project tracking system to help calculate work progress each day and alert managers of any schedule or cost problems. The company realized that the only way to manage multiple dynamic projects and deliver great products is to focus on project management. By monitoring and controlling projects more efficiently, senior managers can focus on issues within the portfolio that need more attention.

(a) Identify THREE practices that would lead to success for software project management.

[3 Marks]

(b) Do you think a software project using Scrum, an Agile approach towards project development and management, would make use of these similar practices? Justify your answers.

[3 Marks]

(c) Identify and describe FOUR soft skills that are required by the project manager and the Scrum Master in order to execute the practices mentioned in the case.

[2 Marks]

(d) As mentioned in the case that monitoring and control activities are important especially when changes are inevitable on most projects. Therefore, it is important to develop and follow a process to monitor and control changes. Describe an effective way to monitor and control changes.

[2 Marks]

Continued ...

Question 2

(a) Critical Path Method (CPM) is a network diagramming technique used to predict total project duration whereby the critical path could be determined. Explain what is a critical path for a project. [1 Mark]

(b) Referring to the sample CPM network diagram as shown in Figure 1, the circles with numbers in them are nodes representing activities done following in sequence. The arrows represent the activities being carried out with time duration (in weeks) to complete each activity. For this sample project, assuming that there is only one worker carrying out each activity. As a project manager, you are required to:

- i) List down all the possible sequences of activities and the total duration for each sequence of activities. [3 Marks]
- ii) Determine the critical path and justify your answer. [1 Mark]
- iii) Identify TWO ways to shorten the project schedule without changing the scope. [3 Marks]

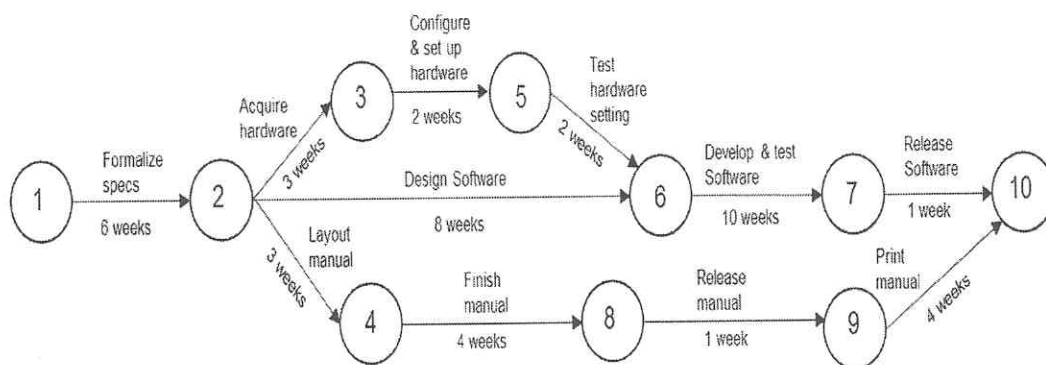


Figure 1 Sample Critical Path Network Diagram

(c) Referring to Question 2 (b), what control action the project manager could do if there is a change in scope in order to shorten the project schedule? [2 Marks]

Continued ...

Question 3

(a) i) Explain why when the project manager is performing cost estimates for a software development project, it is important for him/her to put aside some money for reserves?

[2 Marks]

ii) Do you think these reserves are considered as tangible or intangible costs? Justify your answer.

[2 Marks]

(b) Generally, there are four categories for cost of quality; cost of prevention, cost of detection, cost of internal failure and cost of external failure. Provide ONE example for each of the category of cost of quality. The example provided must be related to software development project.

[4 Marks]

(c) One way of handling conflict of a software project is to confront it directly with a problem solving approach. Identify FOUR other ways of handling conflict.

[2 Marks]

Question 4

(a) Managing communications among team members and relevant stakeholders in a software project is a large part of a project manager's job. Getting project information to the right people at the right time and in a useful format is just as important as developing the information in the first place. Thus, important considerations should include the use of technology, the appropriate methods and media to use. Describe the three communication methods, namely, interactive, push and pull communication with respect to the technology and media being used.

[3 Marks]

(b) Provide TWO reasons to explain why many IT companies are turning to outsourcing.

[2 Marks]

Continued ...

(c) The following table (Table 1), gives the financial success characteristics of two different projects (Project A and Project B) of MyIT company. Based on the information provided in Table 1, answer the following questions.

Table 1

Project A	Project B
20% probability that MyIT will lose \$50,000 on this project.	20% probability that MyIT will win the contract which is estimated to worth \$300,000 in profits.
10% probability that MyIT will not win the contract and the outcome is estimated to be -\$20,000.	80% probability that MyIT will not win the contract and the outcome is estimated to be -\$40,000.
70% probability that MyIT will earn \$60,000 on this project.	-

- i) Draw the decision tree with probabilities and expected monetary values (EMVs). [2 Marks]
- ii) Compute the EMV for Project A. [1 Mark]
- iii) Compute the EMV for Project B. [1 Mark]
- iv) Which project should MyIT bids on and why? [1 Mark]

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